UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,198	04/04/2001	David H. Bessel	40000-0011 (50P4377)	2595

20480 7590 09/16/2008

STEVEN L. NICHOLS
RADER, FISHMAN & GRAUER PLLC
10653 S. RIVER FRONT PARKWAY
SUITE 150
SOUTH JORDAN, UT 84095

EXAMINER	
PARRY, CHRISTOPHER L	
ART UNIT	**PAPER NUMBER**
2623	

MAIL DATE	DELIVERY MODE
09/16/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/826,198	BESSEL, DAVID H.	
	Examiner	Art Unit	
	CHRIS PARRY	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Reopening of Prosecution After Board Decision

1. New evidence has been discovered which indicate nonpatentability of the appealed claims as to which the examiner was reversed. Approval to reopen prosecution under 37 CFR 1.198 for the purpose of entering the new rejection has been submitted to the Technology Center 2600 Director and has been approved. See MPEP § 1002.02(c) and MPEP § 1214.07.

/Wanda L. Walker/

Director, TC 2600

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 4 recites the limitation "said multiplexer" in line 2 of claim 4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 5-13, and 15-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art "AAPA" (figure 1; pages 1-5) in view of Safadi et al. "Safadi" (US 2005/0289617 A1).

Regarding Claim 1, AAPA discloses a television signal processing and recording system (figure 1) for handling both digital and analog video signals (pages 3-4; ¶ 16), said system comprising:

a video decoder (109 – figure 1) in an analog signal path (i.e., received signal from analog tuner 101) for converting an analog signal to a digital signal (page 4, ¶ 18);

an encoder (105 – figure 1) for compressing said digital signal output by said video decoder [109] (page 4, ¶ 18).

AAPA further discloses after analog signal is decoded by decoder 109, the signal can be sent to television 106 for display or the signal can be forwarded to be compressed by MPEG2 encoder 105, where the signal is output to and recorded on a hard disk drive 107 (see page 4, ¶ 18). AAPA fails to specifically disclose a connection for routing said compressed digital signal into a digital signal path in which said

compressed digital signal is either decompressed with a decoder and output to a television set or recorded on a digital data storage device.

In an analogous art, Safadi discloses a television signal processing and recording system (figure 1) comprising:

a video decoder (111/110 – figure 1) in analog signal path for converting an analog signal to a digital signal (i.e., 111/110 must first convert the received analog signal into a digital signal before encoder 110 can compress the signal) (¶ 0037);

an encoder (110 – figure 1) for compressing said digital signal (i.e., encoder compresses the converted analog to digital signal) (¶ 0037); and

a connection (112 – figure 1) for routing said compressed digital signal (i.e., compressed signal from 110) into a digital signal path in which said compressed digital signal is either decompressed with a decoder (103 – figure 1) and output to a television set (¶ 0038) or recorded on a digital data storage device (106 – figure 1) (i.e., received programming may be selectively recorded on the PVR disk 106 under the control of CPU 104) (¶ 0038).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of AAPA to include a connection for routing said compressed digital signal into a digital signal path in which said compressed digital signal is either decompressed with a decoder and output to a television set or recorded on a digital data storage device as taught by Safadi to facilitate combining prior art elements according to known methods to yield predictable

results of efficiently routing analog and digital signals through a system the provides output to a television set and a recording device.

As for Claim 5, AAPA and Safadi disclose, in particular AAPA teaches wherein said digital data storage device (107 – figure 1) is a hard disk drive (pages 3-4, ¶ 16-19).

As for Claim 6, AAPA and Safadi disclose, in particular AAPA teaches an analog tuner (101 – figure 1) for outputting said analog signal to said video decoder (109 – figure 1) (page 4, ¶ 18).

As for Claim 7, AAPA and Safadi disclose, in particular AAPA teaches wherein said encoder [105] is an MPEG2 encoder (page 4, ¶ 18, see also figure 1).

As for Claim 8, AAPA and Safadi disclose, in particular Safadi teaches wherein said decoder [103] is an MPEG2 decoder (¶ 0047).

As for Claim 9, AAPA and Safadi disclose, in particular Safadi teaches wherein said video decoder [111/110], encoder [110], connection [112] and decoder [103] are incorporated in a set-top box (200 - figure 1; ¶ 0034-0038).

As for Claim 10, AAPA and Safadi disclose, in particular Safadi teaches wherein said digital data storage device [106] is incorporated in a personal video recorder (see figure 1, ¶ 0058 and 0052).

As for Claim 11, AAPA and Safadi disclose, in particular Safadi teaches wherein said video decoder [110], encoder [110], connection [112], decoder [103] and digital data storage device [106] are incorporated in a single set-top unit (200 – figure 1; ¶ 0034-0038).

Regarding Claim 12, AAPA discloses a method of processing and recording a television signal that handles both digital and analog video signals (pages 3-4; ¶ 16), said method comprising:

converting an analog signal to a digital signal (i.e., analog signal is converted into a digital signal by video decoder 109) (page 4, ¶ 18); and

compressing said digital signal before outputting said digital signal (i.e., analog signal is compressed by encoder 105) (page 4, ¶ 18).

However, AAPA fails to specifically disclose compressing and decompressing said digital signal before outputting said digital signal to a television set.

In an analogous art, Safadi discloses a method of processing and recording a television signal that handles both digital and analog video signals (¶ 0034-0035), said method comprising: compressing (via encoder 110) and decompressing (via video decoder 103) said digital signal before outputting said digital signal to a television set

(i.e., encoder 110 receives analog signal and coverts the signal to a digital signal before compression) (¶ 0037-0038). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of AAPA to include compressing and decompressing said digital signal before outputting said digital signal to a television set as taught by Safadi to facilitate combining prior art elements according to known methods to yield predictable results of efficiently routing analog and digital signals through a system the provides output to a television set.

As for Claim 13, AAPA and Safadi disclose, in particular Safadi teaches the method of claim 12, further comprising, after converting said analog signal to said digital signal and after compressing said digital signal, routing said compressed digital signal from an analog signal path to a digital signal path (i.e., bus 112) in which said compressed digital signal is decompressed (via decoder 103) and output to a television set (¶ 0037-0038).

As for Claim 15, AAPA and Safadi disclose, in particular AAPA teaches tuning a digital signal with a digital tuner (102 – figure 1) and outputting said tuned digital signal into said digital signal path (page 4, ¶ 19).

As for Claim 16, AAPA and Safadi disclose, in particular Safadi teaches after converting said analog signal to said digital signal (i.e., 111/110 must first convert the received analog signal into a digital signal before encoder 110 can compress the signal)

and after compressing said digital signal (via encoder 110), recording said compressed digital signal on a digital data recording device (106 – figure 1) (¶ 0038).

As for Claim 17, AAPA and Safadi disclose, in particular Safadi teaches wherein said converting and compressing said digital signal are performed with a set-top box (250 – figure 2) and said recording is performed by a personal video recorder (251 – figure 2) (¶ 0066-0068).

Regarding Claim 18, AAPA discloses a system for processing and recording a television signal (figure 1) that handles both digital and analog video signals (via analog tuner 101 and digital tuner 102) (pages 3-4; ¶ 16), said system comprising:

means for converting an analog signal to a digital signal (109 – figure 1) (page 4, ¶ 18);

means for compressing said digital signal (105 – figure 1) (page 4, ¶ 18).

However, AAPA fails to specifically disclose means for compressing and decompressing said digital signal.

In an analogous art, Safadi discloses a system for processing and recording a television signal (figure 1) that handles both digital and analog video signals (¶ 0034-0035), said system comprising:

means for compressing (encoder 110 – figure 1) and decompressing (video decoder 103 – figure 1) said digital signal (i.e., 111/110 must first convert the received analog signal into a digital signal before encoder 110 can compress the signal) (¶ 0037-

0038). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of AAPA to include means for compressing and decompressing said digital signal as taught by Safadi to facilitate combining prior art elements according to known methods to yield predictable results of efficiently routing analog and digital signals through a system the provides output to a television set.

As for Claim 19, AAPA and Safadi disclose, in particular Safadi teaches the system of claim 18, further comprising means for outputting said digital signal (119 – figure 1) to a television set (¶ 0038).

As for Claim 20, AAPA and Safadi disclose, in particular AAPA teaches the system of claim 18, further comprising means for recording (107 – figure 1) said digital signal when said digital signal is compressed (page 4, ¶ 18-19).

As for Claim 21, AAPA and Safadi disclose, in particular Safadi teaches wherein said means for converting [110] and for compressing [110] and decompressing [103] said digital signal are housed in a set-top box (250 – figure 2) and said means for recording (106 – figure 1) are housed in a personal video recorder (251 – figure 2) (¶ 0066-0068).

Regarding Claim 22, AAPA discloses a television signal processing and recording system (figure 1) for handling both digital and analog video signals (pages 3-4; ¶ 16), said system comprising:

a video decoder (109 – figure 1) in an analog signal path for converting an analog signal to a digital signal (page 4, ¶ 18);

an encoder (105 – figure 1) for compressing said digital signal output by said video decoder [109] (page 4, ¶ 18); and

a decoder (104 – figure 1) for decompressing said digital signal (page 4, ¶ 19).

However, AAPA fails to specifically disclose a decoder for decompressing said digital signal compressed by said encoder.

In an analogous art, Safadi discloses a television signal processing and recording system (figure 1) comprising:

a video decoder (111/110 – figure 1) in analog signal path (i.e., receives analog signal from analog security 111) for converting an analog signal to a digital signal (i.e., 111/110 must first convert the received analog signal into a digital signal before encoder 110 can compress the signal) (¶ 0037);

an encoder (110 – figure 1) for compressing said digital signal (i.e., encoder compresses the converted analog to digital signal) (¶ 0037); and

a decoder (103 – figure 1) for decompressing said digital signal compressed by said encoder [110] (¶ 0038).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of AAPA to include a decoder for

decompressing said digital signal compressed by said encoder as taught by Safadi to facilitate combining prior art elements according to known methods to yield predictable results of efficiently routing analog and digital signals through a system the provides output to a television set and a recording device.

As for Claim 23, AAPA and Safadi disclose, in particular Safadi teaches the system of claim 22, further comprising a connection (112 – figure 1) for outputting said digital signal to a television set (via outputs 119) when said digital signal is decompressed (¶ 0038).

As for Claim 24, AAPA and Safadi disclose, in particular AAPA teaches the system of claim 22, further comprising a digital data storage device (107 – figure 1) for recording said digital signal when compressed by said encoder [105] (page 4, ¶ 18).

As for Claim 25, AAPA and Safadi disclose, in particular AAPA teaches the system of claim 22, further comprising a digital tuner (102 – figure 1) for outputting a tuned digital signal to said decoder [104] (page 4, ¶ 19).

As for Claim 26, AAPA and Safadi disclose, in particular AAPA teaches the system of claim 22, further comprising an analog tuner (101 – figure 1) for outputting a tuned analog signal to said video decoder [109] (page 4, ¶ 18).

As for Claim 27, AAPA and Safadi disclose, in particular AAPA teaches wherein said digital data storage device [107] is a hard disk drive (page 4, ¶ 18).

7. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Safadi as applied to claim 1 above, and further in view of Ikeda (US 2001/0042165 A1).

As for Claim 2, AAPA and Safadi disclose, in particular AAPA teaches a demultiplexer (103 – figure 1) in said digital signal path (i.e., receives digital signals from digital tuner 102) for receiving and demultiplexing said compressed digital signal (i.e., via digital tuner 102) when a digital signal received in digital format and not sent through said video decoder (page 4, ¶ 19). However, the combination fails to specifically disclose a demultiplexer in said digital signal path for receiving and demultiplexing said compressed digital signal when said compressed digital signal is routed to said digital signal path or a digital signal received in digital format and not sent through said video decoder.

In an analogous art, Ikeda teaches a demultiplexer (digital video input section 13 - figure 1) in said digital signal path for receiving and demultiplexing said compressed digital signal (i.e., received signal from MPEG encoder 12, see figure 1) when said compressed digital signal is routed to said digital signal path or a digital signal received in digital format (i.e., a digital signal can be directly inputted into section 13; ¶ 0036) and not sent through said video decoder (¶ 0029-0036). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify

the combination of AAPA and Safadi to include a demultiplexer in said digital signal path for receiving and demultiplexing said compressed digital signal is routed to said digital signal path or a digital signal received in digital format and not sent through said video decoder as taught by Ikeda for the benefit of efficiently routing received analog and digital signals to the appropriate device.

As for Claim 3, AAPA, Safadi, and Ikeda disclose, in particular AAPA teaches a digital tuner (102 – figure 1) for outputting a tuned digital signal into said digital signal path (figure 1; page 4, ¶ 19).

As for Claim 4, AAPA, Safadi, and Ikeda disclose, in particular AAPA teaches wherein said digital tuner [102] outputs said digital signal to said [de]multiplexer [103] (figure 1; page 4, ¶ 19).

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Safadi as applied to claim 13 above, and further in view of Ikeda.

As for Claim 14, AAPA and Safadi fail to specifically disclose demultiplexing said compressed digital signal when said compressed digital signal is routed to said digital signal path.

In an analogous art, Ikeda teaches demultiplexing said compressed digital signal (i.e., received signal from MPEG encoder 12, see figure 1) when said compressed digital signal is routed to said digital signal path (¶ 0029-0036). Therefore, it would have

been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of AAPA and Safadi to include demultiplexing said compressed digital signal when said compressed digital signal is routed to said digital signal path as taught by Ikeda for the benefit of efficiently routing received analog and digital signals to the appropriate circuit.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRIS PARRY whose telephone number is (571) 272-8328. The examiner can normally be reached on Monday through Friday, 8:00 AM EST to 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CHRIS PARRY
Examiner
Art Unit 2623

/C. P./
Examiner, Art Unit 2623